STATEMENT OF CONSIDERATIONS

CLASS WAIVER OF THE GOVERNMENT'S U.S. AND FOREIGN PATENT RIGHTS IN CERTAIN IDENTIFIED INVENTIONS MADE IN THE COURSE OF OR UNDER MANAGEMENT AND OPERATING CONTRACT NO. DE-ACO7-84ID12435 BETWEEN THE DEPARTMENT OF ENERGY AND WESTINGHOUSE IDAHO NUCLEAR COMPANY (WINCO) W(C)-94-002; CH0825

The Department of Energy (DOE), unlike most other Government agencies, employs contractors, both for-profit and nonprofit organizations, to manage and operate certain of its major research, production and weapons facilities, and its National Laboratories. Westinghouse Idaho Nucelar Company (WINCO), a large business, for-profit corporation, under Prime Contract No. DE-ACO7-84ID12435 (12435 Contract) with DOE, manages and operates certain of the Government-owned facilities of the Idaho National Engineering Laboratory (INEL) in and near Idaho Falls, Idaho.

These Government-owned, Contractor-operated facilities have for some forty years benefited DOE and its predecessor agencies in carrying out agency research, development, and demonstration programs. Such facilities have, in great measure, had a remarkable record of scientific and technical success. This success is due, in part, to the unique contractual relationship that exists between DOE and its management and operating (M&O) contractors; viz., the dedication of both technical and administrative skills of a private organization, such as WINCO, to a significant Federal mission in a close, long-term, cooperative relationship.

Currently, the Department's nonprofit M&O contractors have the right to retain title to inventions made in the performance of their prime contract with DOE pursuant to Title 35 U.S.C. 202 (Public Law 96-517, as amended by Public Law 98-620), other than those inventions excluded by Section 202(a)(ii-iv).

In 1983, President Reagan's Memorandum on Government Patent Policy was promulgated directing that:

to the extent permitted by law, agency policy with respect to the disposition of any invention made in the performance of a federally funded research and development contract, grant or cooperative agreement award shall be the same or substantially the same as applied to small business firms and nonprofit organizations under Chapter 18, Title 35 of the United States Code.

DOE considered the impact of the President's Memorandum on its patent policy with respect to large business for-profit contractors, including its M&O contractors, and determined that Section 152 of the Atomic Energy Act of 1954 (42 U.S.C. 2182), as amended, and Section 9 of the Federal Non-Nuclear Energy Research and Development Act of 1974 (42 U.S.C. 5908), precluded DOE from automatically granting title to its large business for-profit contractors pursuant to the President's Memorandum.

WINCO, like other of the Department's large business, forprofit M&O contractors, currently has the right to file identified waiver petitions on inventions made in the performance of the 12435 Contract. This process imposes a substantial front end administrative burden--both on the Department and on WINCO in preparing and processing such individual waiver petitions.

With the overall goal of incorporating the research results from the WINCO 12435 Contract into the mainstream of American commerce in the most expeditious manner consistent with the President's Memorandum, as referenced in Executive Order 12591 dated April 10, 1987, and in accordance with the authority of Section 152 and Section 9, above, it is believed to be in the best interest of the United States and the general public to grant a Class Waiver to certain identified inventions made by WINCO under the 12435 Contract as set forth herein.

The scope of this Class Waiver is directed to the class of identified inventions which comprises subject inventions made by employees of WINCO in the performance of the 12435 Contract. is thus intended to treat WINCO substantially the same as M&O contractors which are small business or nonprofit organizations. More specifically, the scope of the Class Waiver shall include U.S. and foreign patent rights to identified inventions made in the performance of the 12435 Contract for the facilities managed by WINCO at the INEL. Excluded from the scope of this Class Waiver are inventions which: (1) fall within DOE's weapons programs, which inventions principally relate to weapons or inherently disclose or suggest a weapons application where such disclosure or suggestion would be detrimental to national security; relate to naval nuclear propulsion; relate to uranium enrichment (including isotope separation); relate to storage and disposal of civilian high level nuclear waste or spent nuclear fuels; fall within and are covered by any other exceptional circumstance determination issued by DOE; (2) relate to subject matter that is classified or sensitive under Section 148 of the Atomic Energy Act of 1954, as amended; (3) come within the ambit of international agreements or treaties in existence at the time of execution of the contract modification effecting this Class Waiver in the 12435 Contract, or future international agreements or treaties, provided WINCO is formally advised in writing of the existence of such prior to the reporting of the inventions to DOE by WINCO; (4) are subject inventions covered by existing or

future Class Waivers granted to third parties by DOE, such as "Work for Others", "Metals Initiative", etc.; or (5) fall within any further exceptions that may, in the national interest, be designated by the Secretary and are added by unilateral amendment by DOE to the 12435 Contract. This Class Waiver does not include inventions of subcontractors under the 12435 Contract.

Most of the inventions made under the 12435 Prime Contract require additional development before they are available in the commercial marketplace. This is because many of the inventions made by WINCO are founded upon basic or advanced research. Additionally, many of these inventions are conceptual in nature and are on a laboratory or proof-of-principle scale. Scale-up to a commercial size demonstration of the inventive concept is often a prerequisite to negotiating royalty-bearing licenses. Finally, many of the inventions arising out of DOE's energy research will require substantial capital and other costs in order to translate the invention into commercial reality; such costs, for example, include further engineering, design, start-up and marketing.

A Class Waiver of the Government's rights in identified inventions as set forth herein will create sufficient exclusive rights in these inventions to bring forth private risk capital to expeditiously promote and move the technology into the commercial marketplace and thereby make the benefits of DOE's programs widely available to the public in the shortest practicable time. The grant of this class waiver will provide WINCO with the certainty of title to subject inventions which will permit early discussions and negotiations with industry with respect to intellectual property rights thereby expediting licensing arrangements and other interactions with industry. of the 12435 contract will authorize WINCO to establish a licensing program whereby waived inventions and copyrighted software can be moved in an expeditious manner into the commercial marketplace by means of appropriate licensing agreements. The grant of the waiver will greatly assist WINCO in implementing this licensing program.

Additionally, under the authority of the "National Competitiveness Technology Transfer Act of 1989" (P.L. 101-189) WINCO is authorized to enter into Cooperative Research and Development Agreements (CRADAs) with universities, the private sector and other Federal laboratories for the purpose of promoting technology transfer between the Federal laboratories and the private sector in the United States. By having a waiver of the Government's rights in subject inventions falling within the scope of this Class Waiver, WINCO will be able to combine, where appropriate, these waived inventions with those waived under the separately issued Class Waiver for CRADAs through license agreements with cost-sharing participants under the CRADAs, thereby enhancing the movement of the waived inventions to the commercial marketplace.

Furthermore, the grant of a Class Waiver of identified inventions as set forth herein will enable DOE to take advantage of the technology transfer capabilities of WINCO. Permitting WINCO to retain title to a broad range of important energyrelated inventions, except those imbued with the national interest, should further enhance the technology transfer initiatives of the Department. Lastly, WINCO has agreed to attempt to commercialize the waived inventions within five years from the time the waiver is This commitment to early commercialization by WINCO effective. will best promote the commercial utilization of such inventions and make the benefits of the research effort conducted under the 12435 Contract widely available to the public in the shortest practicable time, consistent with the objectives and considerations of DOE's waiver regulations. Implementation of this Class Waiver is to be by a simple procedure which requires: WINCO reporting of the invention within the times specified (1) in the 12435 Contract and identifying the source of the program funding in the invention disclosure; WINCO electing in writing whether or not to retain title to (2) the invention at the time of disclosure or within one year of disclosure: Representation after reasonable internal inquiry that the invention falls within the Class Waiver; Representation to its best knowledge and belief that the invention is not subject to international agreements or treaties of the Government, subject to another class waiver, subject of any exceptional circumstances determination, or covered by any other exception to this class waiver; and

(5) Representation that it will attempt to commercialize the invention through its licensees within five years from the time the waiver is effective.

After review of the invention disclosure and relevant facts, DOE Patent Counsel will certify whether the waiver is applicable to the invention. The waiver of DOE rights in an elected invention shall be effective sixty (60) days after receipt by DOE Patent Counsel of WINCO's election of that invention, unless DOE Patent Counsel notifies WINCO within the 60 day period (or a one time extension of thirty (30) days if Patent Counsel advises that the extension is needed for Patent Counsel to make its determination) that a determination has been made that the class waiver does not apply to the invention and the rationale for such determination.

In the interim, pending the grant of this Class Waiver WINCO has submitted a request that several subject inventions be waived to WINCO to establish a patent portfolio. These inventions are of importance to the commercialization efforts by WINCO under its Technology Transfer Program. An expedited processing of the request for waivers in these subject inventions, such as would be effectuated by their inclusion in this Class Patent Waiver grant, is highly desirable and would greatly reduce the paper work associated with processing each such waiver on a case-by-case basis. Accordingly, the scope of this Class Waiver shall include those inventions made by WINCO employees for which WINCO has requested a waiver, as identified in Attachment A.

This class waiver is implemented in conjunction with the implementation of technology transfer as a mission under the 12435 contract. Such was implemented by the incorporation of the Technology Transfer clause into the contract by Modification M158 executed August 12, 1993. Therefore, this class waiver is effective as of August 12, 1993 and shall apply to any subject inventions reported to DOE after August 12, 1993 as well as those inventions listed in Attachment A.

This waiver of the Government's rights in inventions as set forth herein is subject to the Government's retention of: (1) a non-exclusive, non-transferable, irrevocable, paid-up license to practice or to have practiced for or on behalf of the United States the waived invention, and (2) the standard Goverment march-in rights of 35 USC 203. In addition, inasmuch as WINCO has a right to elect to retain title under this class waiver without a showing of any plans and intentions for commercializing a specific invention at the time of its election, DOE, pursuant to the provisions of the 12435 contract implementing, and as a condition of, this class waiver, also has the right at the end of a five year period after the election to require WINCO to grant appropriate licenses if WINCO has not made a satisfactory demonstration that it or its licensee(s) is actively pursuing commercialization of the invention.

The grant of this Class Waiver should not result in adverse effects on competition or market concentration. Waived inventions will be subject to a royalty-free license to the Government and DOE has the right to require periodic reports on the utilization or the efforts at obtaining utilization that are being made for the waived inventions. If WINCO is not making reasonable efforts to utilize a waived invention, DOE can exercise its march-in right and require licensing of the invention.

Accordingly, in view of the statutory objectives to be obtained and the factors to be considered under DOE's statutory waiver policy, the objectives of Public Law 101-189, and Executive Order 12591, all of which have been considered, it is believed that the Class Waiver as set forth above will best serve the interest of the United States and the general public. It is therefore recommended that the waiver be granted.

Robert J Fisher
Assistant Chief
Intellectual Property
Law Division

Date February 23, 1994

Based on the foregoing Statement of Considerations, it is determined that the interest of the United States and the general public will best be served by a waiver of United States and foreign patent rights as set forth herein and, therefore, the waiver is granted subject to the terms of the 12435 Contract as amended. This waiver shall not affect any waiver previously granted.

Thomas P. Grumbly
Assistant Secretary
for Environmental Management

CONCURRENCE:

Date: 3/196

APPROVAL:

Paul A. Gottlieb
Assistant General Counsel
for Technology Transfer

for Technology Transfer and Intellectual Property

Date: 3-7-96

ATTACHMENT A

- Enclosed Rotary Disc Air Pulser, U.S. Patent #4,881,547 (WIN-87-011) S-66,535
- Bellows Sealed Plug Valve, U.S. Patent No. 4,955,581 (WIN-87-007) S-66,505
- Method and Apparatus for Nitrogen Oxide Determination, U.S. Patent No. 4,974,453 (WIN-89-001) - S-69,300
- Digital/Optical Conversion Module, U.S. Patent No. 4,996,531 (WIN-87-030) S-67,318
- Expert Overseer for Mass Spectrometer System, U.S. Patent No. 5,025,391 (WIN-87-037) S-67,703
- Valve Stem and Packing Assembly, U.S. Patent No. 5,044,606 (WIN-87-031) S-67,319
- Battery Driven 8 Channel Pulse Height Analyzer With Compact, Single Gamma-Peak Display, U.S. Patent No. 5,057,690 (WIN-87-023) - S-67,029
- Low Noise Charge Ramp Electrometer, U.S. Patent No. 5,153,502 (WIN-90-028) S-73,311

Patent Applications

- Magnetic Field Controller, DOE Case S-68,681 (WIN-88-025)
- Portable, High Precision Pressure Transducer, DOE Case S-73,314 (WIN-91-001)
- Optical Voltage Reference, DOE Case S-73,885 (WIN-91-005)
- Vortex Diode Jet, DOE Case S-76,774 (WIN-92-005)

Disclosures

- Pulsed Surface Acoustic Wave (SAW) Chemical Sensor System (WIN-93-015) S-79,821
- Remote Controlled Passive Cryogenic Sampler (WIN-93-007) S-79,295

United States Government

memorandum

REPLY TO W. Shepard, DP-14 (6-7906)

SUBJECT: ICPP Inventions

TO: Paul Gottlieb, GC-62

Reference the request from Bob Fisher of the Chicago Operations Office for DP approval for WINCO to retain rights to a list of inventions developed under their 12435 contract at INEL. A list of the inventions, by DOE "S" number and their titles is attached.

It is our understanding that these inventions resulted from programs at INEL that may have involved some or all DP funding and that our approval is now being sought for purposes of transferring titles to these inventions to the new Idaho M&O contractor, Lockheed Martin, so that they can proceed with commercialization of them in accordance with DOE policy. Based on discussions with Mr. Fisher and Messrs. Vern Kubiak and Rich Rankine, of Lockheed Martin (and formerly with WINCO), it is our understanding that, in accordance with then existing policy at Idaho, all of these invention disclosures were reviewed for classification and sensitive information prior to their submission to DOE. While no export control review was conducted at that time, it is our further understanding that Lockheed Martin will conduct export control and Opsec reviews on each of these inventions prior to undertaking efforts to commercially license them.

Based on the above understandings and the apparent lack of any nuclear weapons application for these inventions, we have no objection to the transfer of title to the new M&O contractor, Lockheed Martin.

Technology Management Specialist

Defense Programs

Attachment

cc: Marshall Sluyter, DP-24



ICPP Inventions where WINCO has retained rights under 12435 contract - 12-6-95

| | Filed? | WIN# | US Pat. # | Title |
|----------|-------------|--------|-----------|--|
| S-66,535 | | 87-011 | 4,881,547 | Enclosed Rotary Disc Air Pulser |
| S-66,505 | | 87-007 | 4,955,581 | Bellows Sealed Plug Valve |
| S-69,300 | | 89-001 | 4,974,453 | Method & Apparatus for Nitrogen Oxide Determinator |
| S-67,318 | | 87-030 | 4,996,531 | Digital/Optical Conversion Module |
| S-67,703 | | 87-037 | 5,025,391 | Expert Overseer for Mass Spectrometer System |
| S-67,319 | | 87-031 | 5,044,606 | Valve Stem and Packing Assembly |
| S-67,029 | | 87-023 | 5,057,690 | Battery Driven 8 Channel Pulse Height Analyzer with Gamma Display |
| S-73,311 | _ | 90-028 | 5,153,502 | Low Noise Charge Ramp Electrometer |
| S-68-681 | disclosed | 88-025 | | Magnetic Field Controller |
| S-73-314 | disclosed | 91-001 | | Portable, High Precision Pressure Transducer |
| S-73,885 | disclosed | 91,005 | | Optical Voltage Reference |
| S-76,774 | disclosed | 92,005 | | Vortex Diode Jet |
| S-79,821 | applied for | 93-015 | | Pulsed Surface Acoustic Wave [SAW] Chemical Sensor System |
| S-79,295 | applied for | 93-007 | | Remote Controlled Passive Cryogenic Sampler |
| S-80,157 | (8-19-94) | | | Corrosion Testing Using Isotopes |
| S-80,296 | tbf | | | Modulated Wheatstone Bridge & Synchronizer Circuit for Bolometers |
| S-80,958 | tbf | | | Disposable Remote Zero Headspace Extractor |
| S-80-953 | tbf | | | Pulsed X-Ray Interrogation with Subsequent NIGA Spectrometry |
| S-81,112 | tbf | | | Accelerator-based destruction of hazardous materials |
| S-81,114 | tbf | | | Remotely maintainable top-loading captive ball valve |
| S-81,115 | tbf | | | High precision, high flow range control valve |
| S-81,116 | tbf | | | Closed loop passive cryogenic sampler |
| S-81,184 | tbf | | | Lift station using a vortex diode jet |
| S-81,186 | tbf | | | NO VOG fluidic pumping station |
| S-81,189 | | | | A process for lowering the forming temperature, improving the flow behavior and increasing THW waste loading in alumina silicate based glass |

| | Filed? | WIN# | US Pat. # | Title |
|----------|------------|------|-----------|--|
| S-81,192 | tbf | | | Water cooled stream jet |
| S-81,194 | tbf | | | Optical data acquisition module for remote sensor applications |
| S-81,276 | tbf | | | Solid/liquid mercury separations process |
| S-80,952 | tbf | | | Use of odcpo as a hazardous material extractant |
| S-81,290 | (5-19-95) | | | Boltless flange |
| S-81,813 | (7-14-95) | | | Pneumatic modular walking robot |
| S-81,820 | - tbf | | | Earthworm cable drive system |
| S-81-821 | tbf | | | Earthworm impact boring head |
| S-82,152 | tbf | | | Miniature pipe crawler tractor |
| S-82,154 | tbf | | | Improved vortex diode jet |

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